# **PATENT**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the National Phase Application in the United States of International Patent Application No. PCT/AU01/00893 Filed July 24, 2001

Application No.:

Not assigned yet

Filing Date:

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Applicant:

Olijnyk et al.

Group Art Unit:

Not assigned yet

Examiner:

Not assigned yet

Title:

VEHICLE

CONTROL

CIRCUIT

**ARRANGEMENT** 

Attorney Docket:

BRI-00065

# **PRELIMINARY AMENDMENT**

MIRROR

Commissioner of Patents & Trademarks Washington, D.C. 20231

Sir:

Prior to examination of the present application, please consider the following.

Please amend the above-identified application as follows.

# **IN THE SPECIFICATION**

The specification has been rewritten as follows:

On page 2, the second full paragraph has been rewritten as follows:

A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, each of the motors adapted and mechanically coupled to respective mirror elements so as to control the position of a mirror element with respect

to the vehicle, the control circuit arrangement consisting of a common electronic control circuit located internal of the vehicle for controlling each motor and predetermined other functions of the rear view mirror assembly.

On pages 3-4, the paragraph spanning pages 3-4 has been rewritten as follows: The wiring loom between the two rear view mirrors (located external of the vehicle) and the switches and position levers (which are located internal of the vehicle), and the circuitry (located in each of the housings of the external rear view mirrors) will typically comprise at least one, wire for each switched function such as for example, an approach light, and a wire or wires providing signals representative of the x-y direction of movement required of the mirror glass and others. Two wires per switch are preferable since a single wire will rely on a sometimes unreliable current return path via the vehicle chassis.

After the claims, the following text has been inserted:

#### Abstract

A rear view mirror control circuit arrangement is disclosed for a vehicle. The vehicle may have at least two rear view mirror assemblies each having a housing and respective motors located external of the vehicle. The motors are adapted and mechanically coupled to mirror elements so as to control the position of the mirror elements with respect to the vehicle for the viewing convenience of the vehicle driver. The control circuit arrangement consists of a common electronic control circuit located internal of the vehicle for controlling each motor and predetermined other functions of the rear view mirror assembly. This has the advantage that only one common control circuit is used to control multiple mirrors that being located internal of the vehicle, protects it from extreme environmental and physical conditions. Furthermore, it is cheaper to design and supply as an OEM product to vehicle manufacturers.

### **IN THE CLAIMS**

The claims have been rewritten as follows:

1. (Amended) A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, said motors adapted and mechanically coupled to mirror elements so as to control the position of said mirror element with respect to said vehicle, said control circuit arrangement comprising:

a common electronic control circuit located internal of said vehicle for controlling each said motor and predetermined other functions of said rear view mirror assembly.

- 2. (Amended) A rear view mirror control circuit according to claim 1 wherein said common electronic control circuit controls a motor located in said rear view mirror assembly located internal of said vehicle.
- 4. (Amended) A rear view mirror control circuit according to claim 1 further comprising at least one sensor in said rear view mirror assembly, said rear view mirror control circuit responding to said signals to control one or more of said predetermined other functions of said rear view mirror assembly.

The following new claims have been added:

- 5. (New) A rear view mirror control circuit according to claim 1 further comprising a heat generating member located within at least one of said at least two rear view mirror assemblies.
- 6. (New) A rear view mirror control circuit according to claim 1 further comprising a light emitting member located within at least one of said at least two rear view mirror assemblies.

- 7. (New) A rear view mirror control circuit according to claim 1 further comprising an electrochromic glass member located within at least one of said at least two rear view mirror assemblies.
- 8. (New) A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, said motors adapted and mechanically coupled to mirror elements so as to control the position of said mirror element with respect to said vehicle, said control circuit arrangement comprising:

a common electronic control circuit located internal of said vehicle for controlling each said motor and predetermined other functions of said rear view mirror assembly; and

at least one sensor in said rear view mirror assembly, said rear view mirror control circuit responding to said signals to control one or more of said predetermined other functions of said rear view mirror assembly.

- 9. (New) A rear view mirror control circuit according to claim 8 wherein said common electronic control circuit controls a motor located in said rear view mirror assembly located internal of said vehicle.
- 10. (New) A rear view mirror control circuit according to claim 8 wherein said common electronic control circuit is co-located with control elements for use by a driver of said vehicle.
- 11. (New) A rear view mirror control circuit according to claim 8 further comprising a heat generating member located within at least one of said at least two rear view mirror assemblies.

- 12. (New) A rear view mirror control circuit according to claim 8 further comprising a light emitting member located within at least one of said at least two rear view mirror assemblies.
- 13. (New) A rear view mirror control circuit according to claim 8 further comprising an electrochromic glass member located within at least one of said at least two rear view mirror assemblies.
- 14. (New) A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, said motors adapted and mechanically coupled to mirror elements so as to control the position of said mirror element with respect to said vehicle, said control circuit arrangement comprising:

a common electronic control circuit located internal of said vehicle for controlling each said motor and predetermined other functions of said rear view mirror assembly; and

at least one sensor in said rear view mirror assembly, said rear view mirror control circuit responding to said signals to control one or more of said predetermined other functions of said rear view mirror assembly;

wherein said common electronic control circuit controls a motor located in a said rear view mirror assembly located internal of said vehicle.

- 15. (New) A rear view mirror control circuit according to claim 14 wherein said common electronic control circuit is co-located with control elements for use by a driver of said vehicle.
- 16. (New) A rear view mirror control circuit according to claim 14 further comprising a heat generating member located within at least one of said at least two rear view mirror assemblies.

- 17. (New) A rear view mirror control circuit according to claim 14 further comprising a light emitting member located within at least one of said at least two rear view mirror assemblies.
- 18. (New) A rear view mirror control circuit according to claim 14 further comprising an electrochromic glass member located within at least one of said at least two rear view mirror assemblies.

### **REMARKS**

Claims 1, 2 and 4 have been amended. Support for these amendments can be found throughout the specification and drawings, as originally filed.

New claims 5-18 have been added. Support for these claims can be found throughout the specification and drawings, as originally filed.

The specification has been amended to correct minor typographical, grammatical and syntax errors. The Applicants aver that no new matter has been added to the instant application.

Additionally, the Applicants have provided an Abstract section to the instant application. A separate sheet containing the Abstract is submitted herewith. The Applicants aver that no new matter has been added to the instant application.

The Applicants respectfully request entry of the above amendments. The Applicants submit that no new matter has been added. The Applicants respectfully submit that the application is in condition for substantive examination, and such examination is respectfully requested.

Respectfully submitted,

WARN, BURGESS & HOFFMANN, P.C. Attorneys for Applicants

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Dated: March 21, 2002

PRW/PHS/phs

# **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

# IN THE SPECIFICATION

On page 2, the second full paragraph has been rewritten as follows:

A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, each of the motors adapted and mechanically coupled to respective mirror elements so as to control the position of a [said] mirror element with respect to [said] the vehicle, [said] the control circuit arrangement consisting of a common electronic control circuit located internal of the vehicle for controlling each motor and predetermined other functions of the rear view mirror assembly.

On pages 3-4, the paragraph spanning pages 3-4 has been rewritten as follows:

The wiring loom between the two rear view mirrors (located external of the vehicle) and the switches and position levers (which are located internal of the vehicle), and the circuitry (located in each of the housings of the external rear view mirrors) will typically comprise at least one[,] wire for each switched function such as for example[;], an approach light[;], and a wire or wires providing signals representative of the x-y direction of movement required of the mirror glass and others. Two wires per switch [is] are preferable since a single wire will rely on a sometimes unreliable current return path via the vehicle chassis.

On Page 11, the first line has been rewritten as follows:

[THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS] What is claimed

# **IN THE CLAIMS**

<u>is:</u>

The claims have been rewritten as follows:

 (Amended) A rear view mirror control circuit arrangement for a vehicle having at least two rear view mirror assemblies each having a housing and respective motors located external of said vehicle, said motors adapted and mechanically coupled to mirror elements so as to control the position of said mirror element with respect to said vehicle, said control circuit arrangement [consisting of] <u>comprising</u>:

a common electronic control circuit located internal of said vehicle for controlling each said motor and predetermined other functions of said rear view mirror assembly.

- 2. (Amended) A rear view mirror control circuit according to claim 1 wherein said common electronic control circuit controls a motor located in [a] said rear view mirror assembly located internal of said vehicle.
- 4. (Amended) A rear view mirror control circuit according to claim 1 [receives signals from sensors] <u>further comprising at least one sensor</u> in said rear view mirror assembly, <u>said rear view mirror control circuit responding to</u> [and acts on] said signals to control one or more of said predetermined other functions of said rear view mirror assembly.

### **Abstract**

A rear view mirror control circuit arrangement is disclosed for a vehicle. The vehicle may have at least two rear view mirror assemblies each having a housing and respective motors located external of the vehicle. The motors are adapted and mechanically coupled to mirror elements so as to control the position of the mirror elements with respect to the vehicle for the viewing convenience of the vehicle driver. The control circuit arrangement consists of a common electronic control circuit located internal of the vehicle for controlling each motor and predetermined other functions of the rear view mirror assembly. This has the advantage that only one common control circuit is used to control multiple mirrors that being located internal of the vehicle, protects it from extreme environmental and physical conditions. Furthermore, it is cheaper to design and supply as an OEM product to vehicle manufacturers.